Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An isolated polynucleotide comprising the ~~nucleotide sequence of SEQ ID NO: 1 and 10 to 150 additional consecutive nucleotides immediately upstream from SEQ ID NO: 1, wherein the nucleotide sequence of the polynucleotide is contained in~~ a fragment of SEQ ID NO: 2, wherein said fragment of SEQ ID NO: 2 comprises the nucleotide sequence of SEQ ID NO: 1A, or the complement of said polynucleotide.

2. (Previously presented) The polynucleotide of claim 1, wherein the DNA sequence of SEQ ID NO: 1 and the additional upstream nucleotides comprise a region of DNA that is homologous to or identical to a region of DNA comprising a portion of the human dystrophin gene, wherein the DNA sequence of SEQ ID NO: 1 is inverted when compared to the same sequence of the human dystrophin DNA.

3. (Currently amended) The polynucleotide of claim 1, wherein the polynucleotide codes for a protein or polypeptide that binds to ~~the human CD33 protein~~ a polynucleotide having the sequence of SEQ ID NO: 2.

4. (Canceled)

5. (Previously presented) The polynucleotide of claim 1, wherein the polynucleotide comprises a plurality of translational stop codons.

6. (Canceled)

7. (Canceled)

8. (Previously presented) The polynucleotide of claim 1, wherein the nucleotide sequence of SEQ ID NO: 1 codes for a plurality of translational stop codons.

9. (Currently amended) A regulatory DNA element comprising ~~the polynucleotide of claim 1 or a polynucleotide having the sequence of SEQ ID NO: 1~~ the nucleotide sequence of SEQ ID NO: 1B, or a fragment of SEQ ID NO: 1B comprising the nucleotide sequence of SEQ ID NO: 1.

10. (Previously presented) The regulatory element of claim 9, wherein the regulatory element controls the expression of a nucleic acid to which it is linked.

11. (Previously presented) The regulatory element of claim 9, wherein the regulatory element regulates a transcriptional start site in a nucleic acid to which it is linked.

12. (Previously presented) The regulatory element of claim 9, wherein the regulatory element regulates translation of mRNA transcribed from a nucleic acid to which it is linked.

13. (Previously presented) The regulatory element of claim 9, wherein the nucleotide sequence of the regulatory element codes for a plurality of translational stop codons.

14. (Currently amended) A ~~nucleic acid~~ polynucleotide that hybridizes to either strand of the polynucleotide of claim 1, said ~~nucleic acid~~ polynucleotide comprising an inversion start site of apo-dystrophin-4, wherein a first plurality of nucleotides in said ~~nucleic acid~~ polynucleotide hybridizes 5′ to said inversion start site and a second plurality of nucleotides in said ~~nucleic acid~~ polynucleotide hybridizes 3′ to said inversion start site, or the complement of ~~such nucleic acid~~ said polynucleotide.

15. (Canceled)

16. (Currently amended) A vector comprising a transcription promoter operably linked to the polynucleotide of claim 1 ~~or to SEQ ID NO: 1~~, wherein the sequence of said SEQ ID NO: 1 is inverted with respect to the sequence in normal human dystrophin.

17. (Currently amended) [[A]] An isolated cell comprising the vector of claim 16.

18. (Previously presented) A cell comprising the polynucleotide of claim 1 or a polynucleotide having the nucleotide sequence shown in SEQ ID NO: 1 wherein the sequence of said SEQ ID NO: 1 is inverted with respect to the sequence in normal human dystrophin.

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Previously presented) A polynucleotide comprising the DNA sequence of SEQ ID NO: 2.

23. (Previously presented) The polynucleotide of claim 22, wherein the polynucleotide codes for a polypeptide that cannot be produced in a coupled in vitro transcription-translation system in the absence of SEQ ID NO: 1 or the polynucleotide of claim 1.

24-36. (Canceled)

37. (Currently amended) A pharmaceutical composition comprising ~~the~~ polynucleotide of claim 1 ~~or a polynucleotide having the sequence of SEQ ID NO: 1, or SEQ~~

~~ID NO: 2,~~ and a pharmaceutically acceptable carrier, wherein the composition comprises an effective amount of the polynucleotide for treatment of muscular dystrophy or leukemia.

38. (Canceled)

39. (Canceled)

40. (Canceled)

41. (Previously presented) The polynucleotide of claim 22, wherein SEQ ID NO: 2 codes for a protein or polypeptide that binds to the human CD33 protein.

42. (Previously presented) The polynucleotide of claim 22, wherein SEQ ID NO: 2 codes for a plurality of translational stop codons.

43. (New) The polynucleotide of claim 22, wherein said polynucleotide encodes a protein that is expressed on the cell surface.

44. (New) The polynucleotide of claim 1, wherein said polynucleotide is contained within a vector.

Interview Summary

Applicant thanks Examiner Kaushal for the courtesy of the Interview, held between Examiner Kaushal and Applicant's representative, Lawrence S. Graham ("participants") on May 9, 2005. The participants discussed the pending claims, particularly claims 1, 9, 14, 17 and 37. With respect to claim 1, the participants agreed that the claim could be amended to recite a polynucleotide comprising a fragment of SEQ ID NO: 2, wherein the fragment comprises the nucleotide sequence of SEQ ID NO: 1. Applicant's representative agreed to so amend claim 1. With respect to claim 9, Applicants representative stated that he would point to support in the specification to support patentability of the claim. With respect to claim 14, Applicant's representative explained that the claim was directed to a nucleic acid that hybridized to either side of the inversion start site of SEQ ID NO: 2, so as to be able to distinguish apo-dystrophin 4 from normal dystrophin, and agreed to provide arguments for patentability in the response to the Office Action. With respect to claim 17, Applicant's representative agreed to amend the claim to recite "an isolated cell." With respect to claim 37, Applicant's representative agreed to point to support in the specification at least for a method of treatment of leukemia or muscular dystrophy.

Finally, Applicant's representative asked about adding a new claim, dependent upon claim 22, directed to the polynucleotide of claim 22 that encodes a protein expressed on the cell surface. The Examiner agreed to consider the claim to the extent doing so did not require a new search.